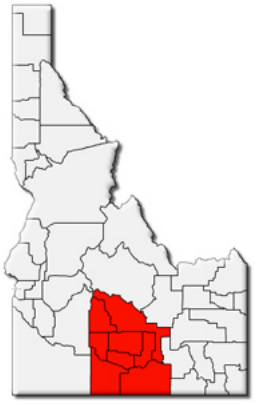
Region 4 Broadband Investment Plan



Priority Need

[1] Eight counties including Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, and Twin Falls make up Region 4 of Idaho. Region 4 has a strong agricultural base and a growing renewable energy industry. In general, the projected future growth prospects are positive for most of the economic drivers in the region. Job growth is expected in Agriculture, Forestry, Fishing, and Hunting, Health Care, Construction, and Educational Services are expected to add significant jobs over the ten year period beginning in 2006 and ending in 2016 (Idaho Department of Labor Industry Projections 2006-2016). Between 2006 and 2016, Utilities, Professional, Scientific, and Technical Services, Accommodation and Food Services, and Self-Employed sectors are projected to decline for the South Central Labor Market Region.

[2] Region 4, the South Central region, has the opportunity to build on its strong renewable energy industry and agriculture base to support economic development in other industry sectors. The wider availability and adoption of broadband has the potential to make Region 4 more attractive to other industries, which would increase economic development and support its rural communities. The US 93 corridor is a critical economic development area. Businesses are moving into the area with the understanding that high speed broadband will be available, but in many cases the needed capacity is not available yet.

Information about broadband speeds and availability according to providers is listed in the table below.

	Telco xDSL	Cable	Fiber	Fixed Wireless	Mobile Wireless
Reported Maximum Download Speeds	**768 Kbps - 6 Mbps**	**10 Mbps - 50Mbps**	**10 Mbps - 1 Gbps**	**1.5 Mbps - 3 Mbps**	**768 Kbps - 1.5 Mbps**
Blaine	**5**	**2**	**0**	**2**	**2**
Camas	**2**	**0**	**0**	**0**	**1**
Cassia	**3**	**1**	**0**	**3**	**2**
Gooding	**1**	**1**	**0**	**2**	**2**
Jerome	**3**	**1**	**0**	**2**	**2**
Lincoln	**2**	**1**	**0**	**1**	**2**
Minidoka	**2**	**1**	**1**	**1**	**2**
Twin Falls	**3**	**1**	**1**	**2**	**2**

Source: LinkIDAHO Provider Survey 2010

2: Overview of Regional Opportunity

[1] Region 4 has the strongest renewable energy industry base in the state of Idaho, covering five of six renewable energy sources: wind, hydropower, biomass, biofuel, and geothermal energy. It has the largest wind farm operation in the state with the potential for another if the China Mountain project goes forward; it has the only producing geothermal site in state; there is an ethanol plant in Burley and one of the largest state hydropower plants is in Shoshone Falls; and there is growth potential in biomass because of the dairies in the region.

[2] Higher levels of broadband connectivity will attract more types of businesses to the region, for example the information technology industry (IT). Economic development groups have been trying to attract software development companies to the region. They tout the region's many recreation opportunities as an asset to entice that type of industry workforce. Jerome has a strong base of skilled workers, which should be an attractive asset to new companies. Additional workforce availability data can be found on the City of Jerome web site.

[3] A diverse group of stakeholders met in December 2010 to assess regional needs that can be advanced by more available and more widely utilized broadband services. The team identified the following regional priorities for which expanded broadband access is needed:

- Increase access to telemedicine/telehealth, particularly via homes
- Improve redundancy (or fiber route diversity) for region.
- Enhance smaller farmers ability to leverage technology for production and compete with larger farms.
- Attract datacenters to locate in Idaho. This would require redundancy or fiber route diversity.
- Increase access to education and training opportunities, including workforce training/professional growth opportunities, especially in rural areas.
- Increase communication assets in Southwest Idaho.
- Leverage videoconferencing resources to support interagency communication and to support communication from clients to service providers.
- Increase public, organizational and private awareness of what can be done with high speed Internet.

[4] The priority selected as the top priority was to **increase capacity for economic development with an emphasis on rural areas**. The group identified a key gap that should be addressed first—the fiber gap between Jerome and Twin Falls.

[5] Region 4 is poised to leverage some recent grants and initiatives that can spur economic development in the region:

- The College of Southern Idaho (CSI) was awarded a $4.4 million Economic Development Administration grant to construct a new Applied Technology and Innovation Center. The center will provide training and education to support energy industry, a growing sector in the region. It is hoped that this asset will be attractive to the energy industry and support recruitment of energy businesses to the area.
- St. Luke's Medical Center has constructed a new facility, which opened in May 2011. The new state-of-the-art health care facility is a 186 bed, 700,000 square foot health care facility, featuring all private rooms. It serves an eight county region in South Central Idaho and Northern Nevada.
- Two initiatives are underway to address attract industry to the region: 1) Through "Project Rail" RIVDA will identify properties around rail access and plot industrial land and green fields in communities. 2) Through the "Cool Spaces" project, they will identify converted warehouse buildings with the goal of attracting software industry.
- The City of Jerome has recently constructed a technology park and is seeking an anchor tenant. The City of Jerome has already installed miles of fiber conduit in the ground that just needs to be populated. Funding is needed to populate the fiber line, link to the fiber backbone in Twin Falls, and possibly develop the POP at the butte. If anchor tenants were secured for the technology park, the hope is that they would fund the development of that last mile.
- In Appendix C, the City of Jerome Proposed and Existing Fiber Optic Lines map from June 2011 shows all the existing and proposed fiber lines from the CSI campus to the City of Jerome and to the Jerome butte. The map illustrates that bringing fiber to Jerome and increasing capacity to the entire Twin Falls area is a close reality. At this time, Jerome has installed fiber conduit for the entire length, except for the five-mile stretch along Highway 25 between Jerome City and Jerome butte. According to plan, this will be installed by August. The City of Jerome is laying another five miles of conduit this summer as part of some sewer improvements they are doing in town. They have already installed nearly 10 miles of conduit, which means they only have 5 more miles to install to create the conduit loop between the Jerome butte and CSI's campus. In other words, a fiber connectivity provider would not need to do any trenching—fiber just needs to be populated through the conduit. They are working with PMC, a Twin Falls business, to get a bid on populating the fiber. The City of Jerome hopes to add fiber conduit along Highway 25 by next year. This stretch is needed to complete the loop which ends at the Highway 93 technology park. There may be enough money leftover from the current trenching project to trench and install conduit there.
- There are currently no plans to get from the Highway 93 technology park to the Jerome butte (Flat Top Butte), which is where the Point of Presence (POP) is. If they connect to the (POP), it would provide more fiber capacity and reliability.
- CSI was awarded a $245,722 "Strengthening Preparedness Planning – Magic Valley Solutions" grant from the Idaho Bureau of Homeland Security will provide a secure communications infrastructure between Twin Falls and Jerome counties. The first phase of the project has provided a secure fiber optic connection between the CSI Health Sciences and Human Services (HSHS) building and St. Luke's Magic Valley Medical Center. The infrastructure will provide a means of secure communications between counties in the event of an emergency or natural disaster. When not in use for an emergency situation, the fiber connections will be used for educational and other purposes as deemed acceptable by CSI and St. Luke's.

Additional high-speed broadband connectivity is needed in the region to attract businesses and support economic development. Other sectors, such as education, would also benefit from the enhanced connectivity if it was available.

3: Proposed Broadband Investment

[1] The top investment priority for Region 4's Planning Team is to increase capacity for economic development with an emphasis on rural areas. This is a plan to bridge the connectivity gap between Jerome and Twin Falls so that economic development in that area can be improved. The background information assembled in this plan also lays the foundation for additional investment plans targeted to other regional priorities.

The following table provides an overview of key planned investments:

Type of Investment	Activities	Responsibility	Dollar Value[1]
Leadership	• Develop infrastructure assessment committee • Develop outreach and awareness committee	Micah Austin Micah, Joe, Jan	
Research	• Conduct broadband demand survey to assess broadband needs and gaps	Joe	
Awareness Programs	• Generate awareness about broadband benefits. • Generate awareness of policies and resources that can support broadband development.	RPT, Idaho Public Libraries, RIVDA, SIECO	
Address Broadband Service Gaps	• Identify costs for bridging gaps. • Outreach to help establish a business case for investment by the region's ISPs. • Identify funding sources and apply for broadband infrastructure grants if appropriate.	Infrastructure committee	

[1] - Note the "dollar value" of investment includes volunteer time, allocation of existing staff to project tasks, new paid staff and other costs. See budget below.

4: Key Tasks and Timeline

Phase 1- Improve Access to Broadband

Summer to Winter 2011

Task 1.1. Identify infrastructure needs, partnerships, costs and factors to consider in order to bridge the connectivity gap between Jerome and Twin Falls.
(Lead: Micah Austin)

Task 1.2 Reach out to other cities who might benefit from Twin Falls-Jerome link. (Leads: Larry will contact Polly.)

Task 1.3 Develop a one-pager to describe this project and that can be distributed to potential partners. (Lead: Micah Austin)

Task 1.4 Get multiple provider bids to create high-speed broadband link between Jerome and Twin Falls. (Lead: Micah)

Task 1.5 Inventory fiber assets in region. Organize regional support to advance solutions to broadband gaps in unserved or underserved areas. Focus priority on areas where a business case for at least one provider for expansion can be identified. Apply for loan/grant applications if needed.

Phase 2: Generate Awareness About Broadband Opportunities

Winter 2011-Spring 2012

Task 2.1 Generate awareness among regional stakeholders including cities and businesses about how broadband can support economic development. Talk to area towns about the benefit of putting in conduit as part of any infrastructure project and the associated cost savings it could bring down the line. He can share the City of Jerome ordinance that requires fiber to be laid when the ground is dug. (Micah and economic development staff)

Task 2.2 Add broadband questions to the regional inventory that SIEDO is working on. (Lead: Jan Rodgers and RIVDA)

Task 2.3 Identify partners such as Idaho Public Libraries, U of I Extension and CSI to support outreach experience to improve skills of businesses, agriculture industry and others in utilizing broadband technologies.

Some of this could occur through the Idaho Commission for Libraries' BTOP project, in which the following libraries are participating:

- Buhl Public Library
- Burley Public Library

- Little Wood River District Library (Carey)
- Camas County Public Library (Fairfield)
- Oakley District Library
- DeMary Memorial Public Library (Rupert)
- Twin Falls Public Library

(Lead: TBD)

Phase 3: Assess Additional Broadband Needs and Opportunities

Spring to Summer, 2012

Task 3.1. LinkIDAHO staff will provide a short survey to assess current broadband connectivity as well as current and desired uses of broadband by key industry sectors.

(Lead: Karen Manuel)

Task 3.2. Distribute the survey to businesses, residents, government, education and health care entities via e-mail, online links, and mail (for those without an e-mail address). Where possible, local economic development and civic organizations will be engaged to help get the word out and distribute surveys. The survey link will also be posted on a web site and announced via mailing lists and meetings.
(Lead: Joe Herring)

Task 3.3.

Information collected through survey will be analyzed and summarized. If possible, this task will be accomplished in collaboration with a local college or university in the region. A report on the survey data will be shared with Regional Planning Team, key stakeholders and service providers.

(Lead: Joe and Karen will see if CSI can assist with analysis.)

Task 3.4.

Identify areas of need for broadband expansion and work on bridging gaps in places where a case for broadband investment can be made. (Lead: TBD)

Task 3.5 Generate awareness of policies and resources that can support broadband development, such as E-rate and USF funding. Coordinate proposals and initiatives to support best use of available assets.
(Lead: TBD)

5: Budget

Budget Category	Project 2011 Budget	Project 2012 Budget
Infrastructure	TBD	Between $50K-630K
Equipment	None	To Be Determined

Budget Category	Project 2011 Budget	Project 2012 Budget
Paid Staff: Contributed Paid Staff Time Funded Paid Staff Time	To Be Determined	To Be Determined
Volunteer Time: Number of Volunteer Hours Value of Volunteers	To Be Determined	To Be Determined
Other: In-kind Research Skills Funded Contract Skills	To Be Determined	To Be Determined

Infrastructure Funding: TBD

Additional funding is needed to fund connectivity between Jerome and Twin Falls. IRON has backbone in the Twin Falls area that municipalities, hospitals, and education institutions can connect to. Expansion of this would enhance connectivity on north and south side. Other problem areas include Rupert, Burley and Minidoka. The cost of extending across the Snake River is high. Albion telephone company will build from their fiber network to Idaho border by the end of 2011. See how this extension will benefit the region.

Funding opportunities that could support rural broadband development include the RUS loan program (requires partnership with telecom provider), federal Universal Service Funding (USF), and the USDA Communities Connect Grant. E-rate is a funding source for connectivity for libraries, hospitals, and schools. US UCAN funds are available to support connectivity between universities and Internet 2 http://www.usucan.org/.

Equipment and Supplies: TBD

Paid Staff: TBD

Contributed In-Kind Staff: TBD

Funded Paid Staff: TBD

Volunteer Time: TBD

University of Idaho and College of Southern Idaho volunteers could be a resource.

Horizons program members could also support some efforts. In particular, the communities of Shosone, Eden and Hazelton are focused on economic development.

Number of Volunteer Hours: TBD

Value of Volunteer Hours: TBD

Other Investment: TBD

Local urban renewal funding is available for certain areas. Look at other sources of funding such as USDA Rural Development's Rural Business Enterprise Grant.

The State of Idaho has expanded their workforce training fund through 2017. It is available for on the job training or specific training in classrooms for new jobs. This may be a resource for a project that includes a workforce training component.

6: Anticipated Outcomes and Impacts

The proposed broadband investments are anticipated to result in several important positive outcomes and impacts for the region including but not limited to:

- Develop a business-friendly environment and enhanced infrastructure that could attract 21st Century industry.
- Prepare the region to compete nationally to attract economic development opportunities.
- Connect like efforts and enhance awareness of ongoing efforts.
- Greater organized regional capacity to identify, prioritize and implement actions to improve availability and adoption of broadband services, especially in underserved rural areas.
- Expand adoption and use of broadband services among businesses and area agriculture industry.
- Improve access to vital basic services such as health care, government, and educational services.
- Strengthen tax base in rural areas associated with new business formation and better access to jobs and critical public services.
- Expansion of broadband service investment in rural locations.

Three-Year Objectives

The following objectives are targeted for Region 4 by 2014:

- All anchor institutions in the region will access a broadband connection of 3 Mbps download or greater and 75% will access a broadband connection of 10 Mbps or greater.
- The economic base of the region will diversify to include the information technology industry and others.

7: Monitoring and Evaluation

[1] Subject to available funding, the LinkIDAHO and a monitoring and evaluation partner will support Region 4 design and implement a comprehensive monitoring and evaluation effort. The monitoring process will focus initially on collecting data on inputs, activities and processes. The evaluation process

focuses on outputs, outcomes and impacts.

Inputs → Activities → Processes → Outputs → Outcomes → Impact

[2] Examples of inputs include such things as number of volunteer hours, hours of paid staff time, number of local partners engaged or time spent in planning meetings. Activities and Processes are such things as progress towards collection of baseline data on broadband access and adoption, collection of baseline data on broadband access and adoption, and so forth. LinkIDAHO and partners will create on-line tools to support this necessary data collection.

[3] The evaluation process will focus initially on outputs and outcomes defined by the above objectives such as expanded awareness of broadband opportunities, or assessing the number of new broadband connections and the uses of those connections. Impact data will go beyond outputs and outcomes to determine such things as the economic impact of new rural business formation, or the impact of broadband on businesses, healthcare or industry. As a data point, the Monitoring and Evaluation Framework will incorporate broadband provider/subscriber data such as the Federal Communication Commission's Form 477 (or equivalent).

[4] Subject to available funding, a detailed monitoring and evaluation plan will be designed and implemented early in 2012.

8: Sustainability Plan

[1] Sustainability will be achieved through the strategic engagement and leveraging of existing organized efforts in the region that include but are not limited to:

- Regional planning team members will engage in a regular regional infrastructure assessment so that the broadband infrastructure can continue to expand and develop over time.
- Identify policy opportunities that could support economic development, such as incentives to attract 21st century businesses. The Idaho Department of Commerce has some incentives for attracting businesses, but primarily in the manufacturing area. Idaho needs incentives to attract 21st Century businesses, such as technology businesses.
- Jerome has been forward looking in its broadband planning. They have a subdivision ordinance or code that requires installation of fiber optic conduit in all open trenches when developing a subdivision. The City of Jerome Subdivision Ordinance (16.28.150 (P) states: P. Fiber Optical Conduit: All developers will be required to pay for and install two inch (2") SDR11 Smoothwall Innerduct fiber optical conduit, which is orange in color, with pull rope, PG style service boxes, forty seven inches (47") high by forty eight inches (48") wide by forty eight inch (48") open bottom and PG style heavy duty cover with support beam. The placement and construction of the fiber optical conduit shall be done in accordance with city of Jerome standards and at the discretion of the city engineer. (Ord. 994 §2, 2006)

9: Appendices

Supporting data addressing topics such as:

Appendix A: Regional Description

[1] Twin Falls is the largest community in the region with a population greater than 44,000 people. Jerome's population as of the 2010 Census was 10,890. Three communities, Hailey, Burley, and Rupert have an estimated population between 5,000 and 10,400. Several communities in the region, Buhl, Filer, Gooding and Wendell, are smaller than 5,000 in population.

[2] Based on 2009 Census estimates, 179,994 people live in the eight county region. Over one-third of the region's total population live in Twin Falls County 75,296. Overall, population grew at rate 9.5% much faster than the statewide average of -0.3% between 2000 and 2009, expanding by 17,594 people. The fastest growing counties during this time period are Blaine 17.6%, Twin Falls 17.1% and Jerome 15.9%. Of the eight counties, only Minidoka County lost population over the past decade -4.7%.

[3] Based on 2008 Census estimates, over 96 percent of the region's population are white compared to about 94% of the state's population. In the Region 4 counties, American Indian's represent less than 1.5% of the total population. Hispanics make up between 20% and 30% of the population in Gooding, Jerome, Lincoln, and Minidoka Counties, stilling well above the state average of 2% Hispanic.

[4] With the exception of Blaine, Camas, and Twin Falls Counties, educational attainment levels are generally below the state average. Statewide, 82.9% of the population over 25 that have a High School Degree or higher. In Blaine County 90.2% of the population has a High School Diploma. In several counties, Cassia, Gooding, Jerome, Lincoln, and Minidoka the percentage of the population with a High School Diploma or higher is lower than 78%. The percent of adults with a Bachelor's Degree or Higher in the eight county region is 18% compared to 14.4% for the state. Again, Blaine County is the exception with 43.1% of the population having a Bachelor's Degree or higher. Region wide, less than 18% of the population have a Bachelor's Degree or higher with only 10% in Minidoka County.

[5] The median value of owner occupied housing per unit for Region 4 is $109,338 contrasted to the state value of $88,600. Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, and Twin Falls counties all have median values between $74,000 and $93,000. The median value in Blaine County is well above the other counties at $288,800.

Appendix B: Regional Economy

[1] 2008 Median household income for the region is $46,209 compared with $36,400 for the state. Highest median income for the state is in Blaine County $65,239 followed by Camas County $49,282. 2008 Median income in Cassia, Gooding, Jerome, Lincoln, Minidoka, and Twin Falls, range between $41,000 and $44,000. An estimated 12.4% of households in the region were below the poverty level in 2008 compared to 19% for the state. 2008 poverty levels highest at 15% in Cassia and Twin Falls Counties.

Economic Trends

[2] The Idaho Department of Labor Industry projects non-farm employment growth by industry for each

of the state's six development regions. Region 4 is a part of the South Central Idaho Labor Market region including Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, and Twin Falls counties. The following table identifies the projected employment change by major sector for the South Central Labor Market.

- Total Employment net new jobs 14,994
- Self-Employed and Unpaid Family net new jobs (272)
- Agriculture, Forestry, Fishing and Hunting net new jobs 2,133
- Mining net new jobs 226
- Utilities net new jobs (70)
- Construction net new jobs 1,635
- Manufacturing net new jobs 1,387
- Wholesale Trade net new jobs 640
- Retail Trade net new jobs 1,178
- Transportation and Warehousing net new jobs 1,288
- Information net new jobs 514
- Finance and Insurance net new jobs 432
- Real Estate and Rental and Leasing net new jobs 124
- Professional, Scientific, and Technical Services net new jobs (93)
- Management of Companies and Enterprises net new jobs 119
- Administrative and Support and Waste Management and Remediation Services net new jobs 1,103
- Educational Services (all ownership) net new jobs 1,437
- Health Care and Social Assistance excluding federal net new jobs 1,671
- Arts, Entertainment, and Recreation net new jobs 390
- Accommodation and Food Services net new jobs (165)
- Other Services (except Public Administration) net new jobs 265
- Government (all federal, state w/o educ & hospitals, local w/o educ & hospitals) net new jobs 1,044
- Unknown net new jobs 7

[3] In general, the projected future growth prospects are positive for most of the economic drivers in the region. Job growth is expected in Agriculture, Forestry, Fishing, and Hunting, Health Care, Construction, and Educational Services are expected to add significant jobs over the ten year period beginning in 2006 and ending in 2016. Between 2006 and 2016, Utilities, Professional, Scientific, and Technical Services, Accommodation and Food Services, and Self-Employed sectors are projected to decline for the South Central Labor Market Region.

Major Employers

[4] The following table lists the top five employers in each of the eight counties that make up the South Central Region, Region 4.

[5] The largest employer in the region is Magic Valley Regional Medical employing 2,000 to 2,900 people located in Twin Falls County. The top five largest employers in most counties in Region 4 employ 100-150 people. The top five employers in Camas County employ 20 to 49 people. These employers are reflective

of the regions economic drivers described above, led in particular by education, local government, and health care industries.

Workforce Profile

NOTE OCCUPATIONAL PROJECTIONS FOR WORKFORCE DEVELOPMENT REGIONS ARE AVAILABLE IN EXCEL FORMAT HERE

[6] The following occupational categories are projected to result in the ten largest net job growth between 2008 and 2018 within the Idaho Department of Labor, South Central Idaho Occupation Projections of which Region 4 is a part.

- Total, All Occupations net new jobs 13,208
- Office and Administrative Support Occupations net new jobs 1,703
- Farming, Fishing, and Forestry Occupations net new jobs 1,657
- Agricultural Workers net new jobs 1,533
- Transportation and Material Moving Occupations net new jobs 1,373
- Farmworkers and Laborers, Crop, Nursery, and Greenhouse net new jobs 1,199
- Education, Training, and Library Occupations net new jobs 1,045
- Management Occupations net new jobs 1,026
- Motor Vehicle Operators net new jobs 984
- Food Preparation and Serving Related Occupations net new jobs 930
- Sales and Related Occupations net new jobs 870

[7] These projections emphasize job growth, will grow across a wide spectrum of occupational skill categories. Some fields such as Education, Training, and Library Occupations will require workers with higher levels of education. Others such as Food Preparation may require less formal post high school education.

[8] Overall the occupational and industry trends framing economic development in the South Central Region, Region 4 point to the need for effective education and training networks including the continued leveraging of distance delivery technologies supporting access at home and at places of work.

Workforce Challenges

[9] According to Regional Economist Jan Roeser, the area community colleges have strong partnerships with four-year institutions throughout the state. Training programs are designed by the College of Southern Idaho to be responsive to businesses needs with the College of Southern Idaho playing a key role in recruitment and expansionary needs of businesses.

[10] The College of Southern Idaho has created a couple of renewable energy programs that are getting much interest including the Wind Technician program, the Water Resource Program and the Environmental Technology program that combines several renewable energy studies. The wind and environmental technicians ability to find jobs is the big unknown since students are still in the process of completing their associate degrees for these new programs. The College of Southern Idaho was recently awarded $5 million toward the construction of a renewable energy building to be built on the existing

campus.

[11] The growth of wind turbines in Gooding County and sprinkled over in Cassia County has been tremendous and well received over all, which has not been the case elsewhere. China Mountain is a large wind farm that is currently going through the BLM environmental impact process with an emphasis on sage grouse habitation. The wind farm will have 200 turbines, requiring 40 technicians since safety standards have been scrutinized and for every ten turbines, two technicians will be required for maintenance and repair.

[12] The biggest challenge for the unemployed is finding jobs for their specific work values and preferences including avoiding formal education, an inclination toward outdoor work, interest in high pay rates and marginal computer skills. The construction industry was a large employer of workers offering on the job training and these jobs will not be replaced in the very near future. The outcome for many of these workers will depend on their abilities to recreate themselves in another occupation.

[13] Health care occupations are projected to do well in the area with the new regional St. Luke's Medical Center. The new health care reform bill should only assist in lowering the county and hospital's indigent care line item on their budget and many larger employers have already experienced young men and women being added to their parent's insurance for coverage which creates new demand for services.

[14] There are many occupations projected in the region for high demand, high volume and high wage. They are condensed in the Top 30 list below of Hot Jobs as determined by models created by Idaho Department of Labor and the Bureau of Labor Statistics. Five of these are associated with health care but the renewable energy sector does not show up because the jobs are typically higher skilled but not numerous as is the case with most hot jobs. The list has a number of occupations that traditionally follow population growth and the region has experienced 10.7 percent growth from 2000 to 2009. EMSI forecasts growth over the next ten years at 6.06 percent, which is too conservative

[15] HOT Jobs Rank SOC Code Occupational Title 2018 Projected Employment

1. 11-9011 Farm, Ranch, and Other Agricultural Managers 2,679
2. 25-2021 Elementary School Teachers, Except Special Education 1,678
3. 29-1111* Registered Nurses 1,424
4. 13-2011 Accountants and Auditors 412
5. 53-3032 Truck Drivers, Heavy and Tractor-Trailer 3,828
6. 15-1041 Computer Support Specialists 418
7. 43-4051 Customer Service Representatives 959
8. 43-1011 First-Line Supervisors/Managers of Office and Administrative Support Workers 996
9. 15-1051 Computer Systems Analysts 236
10. 45-1011 First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers 343
11. 43-6011 Executive Secretaries and Administrative Assistants 565
12. 29-2061* Licensed Practical and Licensed Vocational Nurses 471
13. 25-9041 Teacher Assistants 1,043
14. 41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products 812

15. 11-1021 General and Operations Managers 1,669
16. 39-9031 Fitness Trainers and Aerobics Instructors 220
17. 45-2092 Farmworkers and Laborers, Crop, Nursery, and Greenhouse 5,146
18. 29-1051 Pharmacists 160
19. 21-1015 Rehabilitation Counselors 387
20. 13-2072 Loan Officers 176
21. 43-3071 Tellers 491
22. 31-1011 Home Health Aides 895
23. 11-3031 Financial Managers 347
24. 11-2022 Sales Managers 206
25. 37-3011 Landscaping and Groundskeeping Workers 1,187
26. 43-3031 Bookkeeping, Accounting, and Auditing Clerks 1,635
27. 39-9021 Personal and Home Care Aides 502
28. 31-9091 Dental Assistants 304
29. 49-9042 Maintenance and Repair Workers, General 785
30. 11-1011 Chief Executives 398

[16] Some of the challenges that employers face in the region include the lack of a four-year university which typically draw a cluster of young people that focus on research and development. The innate rural nature is more drawn to industries associated in some way with agriculture and lately with water resource and renewable energy. The focus is not on knowledge industries that bring a younger population to the area or retain the younger population. The brain drain has been an issue that community leaders and employers are concerned with as students leave for college but may not be successful at that venture. They settle down with a lesser skilled job in a larger area and do not return. The recession may have curtailed some of that as younger people have returned to the family fold for lack of resources to make it on their own due to the lack of available jobs. The industries that do not require secondary education complain that parents and students don’t give their occupations serious consideration. At the same time, the employers have been disappointed in the quality of the workforce with responsible, dedicated, punctual workers more difficult to hire. These industries are requiring more skills than in the past and the math, computer and even measuring skills for construction trades are lacking. The emphasis has been on traditional studies and the employers are providing what they consider remedial training to bring them up to par or they just aren’t hiring until they get the ‘right’ person for the job.

[17] Job seekers are faced with employers that have been burned in the past and are not as willing to take chances on marginal employees. They are willing to let business growth opportunities pass them by or invest less in expansion because they do not want to take time to train and then have to discharge workers due to lack of both technical or hard skills and soft skills such as initiative, punctuality, ability to work in a team setting, problem solving, and behavioral skills.

[18] The generational difference between employer and worker will only become more defined as the population ages and more employers will be older with a stronger work ethic. The Y Generation is the largest incoming component of the workforce and is very tech savvy but also feels very entitled and needs a lot more stroking and positive feedback than most Baby Boomer or Generation X managers will want to provide. The management and employment of this generation will not be an easy process but the

group is highly technical and will make the workplace more efficient.

[19] The generational topic was broached because the nation is certainly aging and South central Idaho seems to attract a large number of retirees due to family ties, the Wood River Valley draws retirees due to its recreation and mountain-town atmosphere and sophisticated cultural events, and the lower seven counties have lower costs of living for an aging population. It has been identified that the retirees do want to remain in the workforce but in a more flexible and part-time arrangement. It is projected that the 50 and over population will grow by 13 percent over the next ten years regionally while the 49 and under will grow by only 3 percent, according to EMSI, Inc. 4th quarter 2010. In essence, employers will need to come to terms with the concept that the greatest growth of population will be in the older worker category over the next ten years.

Appendix C: Broadband Availability

Sixteen providers across five categories responded to the June 2010 LinkIDAHO "provider survey" indicating they deliver a broadband service within the South Central Region. Among those providers, seven report delivering Digital Subscriber Line Service, two cable providers offer a broadband service, two telephone companies deliver broadband to the customer with a direct optical fiber connection, three fixed wireless companies and two provide mobile broadband service. The table below summarizes the number of broadband service providers offering service in each county of the region for the different technologies.

	Telco xDSL	Cable	Fiber	Fixed Wireless	Mobile Wireless
Reported Maximum Download Speeds	**768 Kbps - 6 Mbps**	**10 Mbps - 50Mbps**	**10 Mbps - 1 Gbps**	**1.5 Mbps - 3 Mbps**	**768 Kbps - 1.5 Mbps**
Blaine	**5**	**2**	**0**	**2**	**2**
Camas	**2**	**0**	**0**	**0**	**1**
Cassia	**3**	**1**	**0**	**3**	**2**
Gooding	**1**	**1**	**0**	**2**	**2**
Jerome	**3**	**1**	**0**	**2**	**2**
Lincoln	**2**	**1**	**0**	**1**	**2**
Minidoka	**2**	**1**	**1**	**1**	**2**
Twin Falls	**3**	**1**	**1**	**2**	**2**

Percent of Region/County Population living in Census Blocks with Maximum Download Speeds Offered at:					
Region/County	10 Mbps or greater	3 - 10 Mbps	Less than 3 Mbps	Mobile Option Only	No option greater than 768 kbps
Region 4	**70.16**	**24.15**	**5.65**	**3.02**	**0.05**
Blaine	89.63	3.52	6.76	1.2	0.09
Camas	0	0	100	6.99	0
Cassia	51.02	35.34	13.35	7.76	0.3
Gooding	52.04	44.02	3.94	3.41	0
Jerome	52.76	34.04	13.2	8.86	0
Lincoln	41.44	53.25	5.31	4.92	0
Minidoka	62.85	35.92	1.23	0.62	0
Twin Falls	82.37	16.45	1.18	0.97	0

Source: LinkIDAHO Provider Survey 2010

Telco xDSL

Digital Subscriber Line (DSL) is the most prevalent of broadband services in the region. DSL has been the primary broadband technology deployed by telephone companies for quite some years because it makes good use of existing phone lines. South Central Idaho providers responding the LinkIDAHO survey report maximum download speeds ranging between 768 Kbps to 6 Mbps over DSL lines. Many factors determine the potential delivered speed. At least one DSL provider operates in every count of the region. Qwest reports offering DSL in every county of the South Central Region except Camas County. Frontier and Rural Telephone Company offer DSL within parts of Camas County.

Cable

Two cable TV companies also offer high speed internet service. Broadband is provided over a combination of coaxial and fiber lines with speeds. Cable One Communications offers a high speed internet service in all South Central Counties with the exception of Camas County. Cox Communications reports offering a cable service in Blaine County. No companies offer service in Camas County. Maximum download speeds offered by cable providers responding to the LinkIDAHO survey are between 10 Mbps and 50 Mbps.

Fiber

Level 3 Communications, LLC provides fiber to the customer service in Minidoka County. American Fiber Systems provides fiber-based broadband in Twin Falls County. Fiber has an advantage over DSL in that high speeds can be transmitted further from the primary network serving equipment. No companies provide service in Blaine, Camas, Cassia, Gooding, Jerome, and Lincoln Counties. The companies providing fiber to the customer connections in South Central Idaho report maximum download speeds in the range between 10 Mbps to 1 Gbps.

This is a link to the current and proposed fiber in the City of Jerome PDF.

Fixed Wireless
Three companies provide fixed wireless broadband service in the South Central Region of Idaho. No companies offer service in Camas County. Digital Bridge Communications, Direct Communications, and Filer Mutual Telephone Company offer service in select areas across the region. The companies providing fiber to the customer connections in South Central Idaho report maximum download speeds in the range between 1.5 Mbps to 3 Mbps.

Mobile Wireless
Verizon Wireless provides a broadband service in all eight South Central Idaho Counties. AT&T Mobility LLC offers broadband service in every county in the region except Camas County. Mobile wireless carriers providing a broadband service in the region indicate the maximum download speed they offer is between 768 Kbps and 1.5 Mbps.

Appendix D: Broadband Adoption

[1] LinkIDAHO launched a consumer research survey during July 2010 in Idaho to ask residents about broadband high-speed internet service. The focus of the research was to identify how households use broadband and the benefits that are derived from its use. A combination of telephone interviews and on-line surveys was used to capture this information.

[2] From Region 4 South Central Idaho, 197 people responded to the survey. They were asked to select how many hours per day their household spends online. Nearly than 34% of the Region 4 population access the internet from 1 to 3 hours per day. Of those who responded to the survey, 22.4% selected they access the Internet one hour or less per day. 16.9% selected 3 to 5 hours per day for the amount of time their household access the Internet. Compared to the rest of the state, Region 4, at 12%, has the highest number of people accessing the Internet from 5 to 7 hours per day.

[3] For the question asking what is the last grade of class you completed in school, the majority, 24.9% responded some college. High school graduate made up 30.5% and college graduates made up 23.9% of the Region 4 survey responders. Just over 11% of the respondents selected advance degree. 7.1% selected less than high school. Only 2.5% of the respondents refused to answer the question about the last grade completed in school.

[4] Most, 25.9%, of the people who responded to the Region 4 survey about income refused to answer about their household income. However, 18.8% responded $50,000-$74,999 as their combine household income before taxes. Just over 4% responded $150,000 or more, similarly 5.6% responded $100-149,000, and 9.6% responded 75,000-99,999. 36.1% of the survey responders, selected a household income less than $49,999, these included the following four categories: less than $15,000, $15,000 - $14,000, $25,000-$34,000, and $35,000-$49,000.

[5] Regarding ethnic background, 85.8% consider themselves White non-Hispanic. Other, don't know, or refused was selected by 3.5% of those surveyed. No one selected Asian non-Hispanic and only 0.5% responded Native American non-Hispanic to the Region 4 survey. 5.1% was selected for both African

American and Hispanic.

[6] The majority of the population from Region 4 accesses the internet from a home computer. Of those who responded to the survey, 79.6% selected home computer as a device they use to access the internet. The second most selected category to access to Internet is a work computer at 45.1% followed by a school computer at 35.9%. 16.5% of those who responded selected computer anywhere else. Only 9.7% of Region 4 responded no one uses the Internet anywhere. Portable devices are not as commonly used as a traditional computer, 15.5% selected smart phone, 19.9% selected other mobile phone, and 13.1% selected other portable device that can access the Internet.

[7] The majority of the Region 4 population access the internet to get news, weather, sports, or financial information. Of those who responded to the survey, 68% selected to get news, weather, sports, or financial information. The second most selected category for use of the Internet handle banking and/or investments at 60.2% followed by play games at 59.2%. 58.7% of those who responded selected, buy or sell things. Only 15% of Region 4 responded Internet phone service VoIP. Work and education related tasks are not as commonly performed on the Internet as personal activities, 34.5% selected work from home, 24.8% selected search for job information, and 37.9% selected access educational services such as distance learning.

[8] The main reason people in Region 4 do not use the Internet is because they do not have a computer. Of those who do not use the Internet 40% responded I do not have a computer. The second highest response it is a waste of time with 20%. 5% responded to both it is too difficult/frustrating and I'm worried about others gaining access. 10% of the Region 3 population responded no need for the Internet while another 10% responded it is not available.